

# ENVIRONMENTAL ASSESSMENT OR 125-00-05

## EMERGENCY REPAIR OF FEDERALLY OWNED ROADS (ERFO)

A Proposal to Decommission, Repair, or Realign Storm Damaged Roads  
Within the Coos Bay District

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This action is subject to and in conformance with the *Coos Bay District Record of Decision and Resource Management Plan*, dated May 1995, and the *Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* with its *Record of Decision and Standards and Guidelines* (Interagency, 1994).

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## SECTION I - PURPOSE AND NEED FOR ACTION

### Purpose and Need

The Bureau of Land Management (BLM), Coos Bay District (CBD), controls an extensive road system. Winter storms can damage parts of the road system and minor maintenance and repairs normally bring damaged areas back to proper function. However, the winter storms of 1998-1999 caused severe damage to six roads such that routine actions can not restore them to their proper function. Steep slopes and saturated soils, compounded by lack of culverts or culvert failures at some of the sites, resulted in mass soil movement. Slide material was deposited on the road prism and/or the road slumped. The damaged roads can lead to increased sediment delivery into streams, impacting fish, fish habitat, and other riparian aquatic life. Federal funding through Emergency Repair of Federally Owned (ERFO) roads has been applied for to repair this damage.

The goal of the preferred alternative is to reduce the potential for sediment delivery to streams from these six road failures, while effectively managing public resources. In addition to the six project sites, four waste sites are identified for disposal of material excavated from project locations (see Table 1 and Location Maps).

Direction for management actions regarding these roads comes from the *Final Coos Bay District Resource Management Plan (RMP) and Environmental Impact Statement (EIS)* - (BLM, September 1994), and its *Record of Decision (ROD)* - (BLM, May 1995), and from the *Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* (Interagency, February 1994) (FSEIS; Northwest Forest Plan), its *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl*, and accompanying *Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* (Interagency, April 1994). This Environmental Assessment (EA) is tiered to these documents. Watershed analyses are completed for these areas and are hereby incorporated by reference. The above documents are available for review at the Coos Bay and North Bend Public Libraries, the Coos Bay District Office of BLM, and the Oregon State Office of BLM in Portland, Oregon. This plan has been reviewed to determine if the preferred action conforms with the land use plan's terms and conditions as required by 43 CFR 1601.5. The preferred projects are in conformance with the Aquatic Conservation Strategy (ACS) objectives as described in the Standards and Guidelines (S&G's, pp. B-9 through B-34) of the Northwest Forest Plan. The analysis file for this project contains several reports from staff specialists, which are hereby incorporated by reference.

Management activities within the natural range of POC conform to the BLM *Port-Orford-Cedar Management Guidelines*, to mitigate damage caused by *Phytophthora lateralis* (ROD, p. 23). They will also conform to the *Noxious Weed Strategy for Oregon & Washington* (USDI BLM August 1994) and *Partners Against Weeds*, An Action Plan for the Bureau of Land Management (USDI BLM January 1996). The above are hereby incorporated by reference.

This EA assess and mitigates potential impacts that may result from implementing either the "No Action or Preferred Action" alternative, and documents the decision-making process. The decision to be made from this EA for each damaged road segment is to:

- ✧ Not implement major repairs to damaged sites (No Action), or
- ✧ Implement major repairs, as described in this document (Preferred Action).

### Issues, Concerns, and Opportunities

The basis for developing these project-specific proposals, were the result of a major storm event road inventory locating six severe road failures. Issues, concerns, and opportunities were

developed by the interdisciplinary team (IDT) assigned to the repair projects and/or from public input during the scoping process, which identified the following:

#### Issues Studied but Eliminated from Consideration

Some issues identified were eliminated from analysis as not being significant, not implying different actions, or not requiring other mitigations beyond using Best Management Practices (BMPs) as listed in the RMP and ROD when implementing any action or alternative and thus not suggesting different alternatives, are as follows:

- ✧ Short-term interruptions of instream flow during construction, loss of wildlife habitat, direct wildlife mortality, hazardous materials leakage/spill, Port Orford Cedar Management, cultural resource discoveries, and nonnative plants (especially noxious weeds) issues are covered by project design features or use of BMP's.
- ✧ Aquatic species passage through culverts (topography at the Paradise site is so steep that it is a natural barrier to amphibians - at the remaining sites there is no defined stream and thus no stream crossing to maintain).

#### Issue: Sedimentation

Mass soil movement caused road failures at many locations due to steep slopes and saturated soils, and was compounded by lack of culverts or culvert failures at some of the sites. The current site conditions can lead to increased sediment delivery into streams. Sediment deposits in amounts above a stream's ability to process and flush can have impacts on fish, fish habitat, and other riparian aquatic life. Sediment deposits depend on the timing and duration of sediment delivery, and the stream gradient.

#### **Geographical Area**

The projects sites occur on land or roadways presently managed or controlled by BLM within the Umpqua Resource Area (see Table 1 and Location Maps).

#### **Permits, Licenses, and Entitlements Necessary to Implement the Projects**

No Federal permits, licenses, or entitlements are required for these projects.

## SECTION II - ALTERNATIVES INCLUDING THE PREFERRED ACTION

### No Action Alternative

Under the No Action Alternative no major road repair, to federal government standards, or road decommissioning would occur. Routine BLM road maintenance and monitoring inspections, as identified in the ROD, would continue. Maintenance may involve minor repairs to the damaged sites and might include cleaning culverts and ditches, moving slide material to allow traffic passage or blocking roads with barriers. Inspections are conducted annually on major roads and roughly every two or three years on smaller spur roads and would only detect increased erosional damage after it had occurred. At passable sites traffic would have to slow down and use caution to pass. At blocked sites traffic would be stopped, with no access to areas beyond the failure. The potential for continued slumping or failure at these sites could be high.

Should management actions by other adjacent landowners necessitate access beyond the road failures then the road repairs would be made by those landowners. Repairs would be according to private standards (subject to state requirements), which may be less than federal standards.

Due to the significant problems at the Honcho Creek Site mitigation beyond routine maintenance is suggested if funding is available. Following BMP's, the road fill should be pulled from the stream channel and seeding, mulching, and fertilization of the site should occur,.

### Preferred Action Alternative

The Preferred Action addressed whether future management actions by BLM, timber companies, or adjacent landowners would require access beyond the road failure, which would necessitate repairing the damage. Each site was carefully considered for potential road decommissioning. Initial Transportation Management Objectives (TMOs) identified in watershed analysis for these areas indicated that access was required beyond the road failures. These sites have Right-of-Way Agreements (RWA) that provide companies or individuals access to their lands and cannot legally be closed without their consent. Objectives in the Record Of Decision for BLM's transportation system include: short and long term transportation needs, reconstruction prioritization based on current and potential impact to riparian resources and the ecological value of the riparian resources affected, and decommissioning or obliterating roads based on current and potential effects to Aquatic Conservation Strategy objectives. On site discussions covered these consideration and included the cause of the failure, issues of concern (ex. safety for woods workers/recreationists), land use allocation, and current or future management needs of the resource values. The current road failures are unsafe for vehicle traffic, and more permanent blockages and road signs will be installed on roads that are decommissioned or not repaired.

The Preferred Action covers:

- ✧ Repairing or rebuilding four damaged roads within, or nearly within, their original alignment.
- ✧ Waste sites are identified for three of the repair sites. The North Fork Ridge repair site has two waste sites identified, one of which is to be used only for rock storage (for use in future projects).
- ✧ Decommissioning one damaged road (27-10- 4.1), one road (21-9-29.2) that will be used as a waste site, and a previously closed road (21-8-9.1) will be opened for waste disposal purposes.
- ✧ Geotechnical investigation will occur on road 29-12-1.1. This investigation would determine if realignment of the road is feasible and aid in the design process.

Repairing or rebuilding damaged roads would occur within or nearly within their original alignment (i.e. the road could be moved to the side 10 to 30' from its' existing location). See Table 1 and **Map 1** below for damaged site locations, and the Preferred Action for each location.

Repairs would require the use of standard engineering practices such as: a) buttressing, reestablishing, reinforcing, and/or armoring the fill slope; b) reconstructing the subgrade and running surface of the road, if needed blasting would occur; c) reestablishing ditchlines to control surface runoff; and d) repairing or replacing culverts as necessary to provide adequate drainage. Work will involve the use of trucks and other heavy motorized equipment, chainsaws, diesel powered drilling units, and road paving equipment. Blasting equipment may also be utilized. Generation of noise above ambient levels has the most potential for negative impacts on wildlife. Blasting is the activity that would generate the highest noise level of the project types, but would occur at only a few sites, and would be of limited duration. Blasting would be limited to fixed areas about 30-40 feet long and 2-3 feet deep. All repair procedures on public lands are required to meet, or not retard, the attainment of Aquatic Conservation Strategy objectives. Total work time for any one project site should not exceed a few weeks. Affected roads may be closed to through traffic during construction. Removal of trees/vegetation would be kept to a minimum.

Waste sites are proposed for three of the six repair sites. These four waste sites will be used for deposition of the slide material from the road templates, and/or excavated material (see Table 1 and Location Maps). One of the waste sites will only be used to store rocks for future management needs.

Decommissioning of Honcho Creek Mainline is proposed. This road was identified as not being needed for resource management by BLM, timber companies, or private landowners with road use agreements. Additionally, two roads connected with the waste sites will be decommissioned. One proposed waste site is a road and would be decommissioned after use, the other waste site is behind a closed road which would be opened and then decommissioned after use.

On-site geotechnical investigation (drilling holes in the ground and recording data about the subsurface) would be required at the John's Creek site (T29S, R11W, Sec. 7 prior to project design, to determine the nature of the instability, depth to ground water, and/or depth to bedrock.

### **Project Design Features**

Many of the following are Best Management Practices (BMP's) but are included here for emphasis.

1. If any cultural materials are encountered during activities associated with this project, all work must stop, and the District Archeologist must be notified at once.
2. Noxious weeds are to be treated at each site and along haul routes prior to starting work.
3. Stabilize all exposed soil and waste sites with BLM approved grass seed mixtures (use native grasses if available), fertilizer and mulch. Grass and straw mulch material shall be certified as weed free, and should be obtained from local sources, if possible. Soil stabilization should be completed upon completion of construction activities at each site, rather than waiting until all sites are completed. Sites with little or no revegetation after one growing season should be reseeded, fertilized and mulched.
4. Ditch relief culverts will be replaced and/or spaced at appropriate intervals according to road width and slope, to prevent excessive road runoff and associated sediments from traveling to and reaching stream channels.
5. Contain offsite movement of sediment from waste sites, roads, or ditch flow near streams with silt fence or sediment entrapping blankets or straw bales. These must allow for the free passage of water without detention or plugging and should receive frequent maintenance. They will be removed at the completion of work, with sediment retained by the filters to be transported to an upland location to prevent subsequent delivery to aquatic resources. (locations to be specified by BLM hydrologist or fisheries biologist).
6. Waste disposal sites are not to be in riparian reserves and need to be stable. Waste sites need to be approved by a geotechnical engineer or other qualified personnel. Design features will include erosional controls to minimize sediment delivery to water bodies.

7. Where landslides have removed vegetation from within Riparian Reserves, areas suitable for reestablishing conifer should be planted in order to stabilize soils in the long-term and provide future sources of large woody material.
8. Any existing down wood or live trees cut during construction activities should be scattered on site with priority given to the riparian area.
9. The contract will include standard Threatened and Endangered Species stipulation(s).
10. Any significant changes to the action (including the time period of excavation and hauling) shall require further review.
11. No blasting will occur at John's Creek or at the North Fork Ridge Waste Site 1 during the period 1 March - 5 August. At the remaining sites, no blasting will occur during the period 1 March - 30 September. For all sites, non-blasting activities will occur no earlier than 2 hours after sunrise and no later than 2 before sunset during the period 1 April through 15 September. This is from the 1998 Coos Bay District Biological Opinion (US Fish and Wildlife Service 1998, # 1-7-98-F-079).
12. The Contractor shall be required to follow BLM's Hazardous Materials Contingency Plan and procedures, and specific directions found in the District Oil Spill Plan. This includes having a Spill Prevention, Control and Countermeasures Plan (SPCC) in place, and a Petroleum Spill Kit on site during operations.
13. Equipment used during this project shall be inspected and cleaned prior to move-in, to limit the introduction or spread of: petroleum or other chemical contaminants; noxious weeds; and POC root rot disease. Any visible leakage of petroleum product shall be corrected. Equipment shall be washed offsite at a commercial facility. Wash receipts are to be filed in the main contract file.
14. All storm damaged sites covered by this EA fall within the range of listed, proposed, or candidate fish species. Mandatory terms and conditions that resulted from the National Marine Fisheries Service's (NMFS) March 18, 1997 Biological Opinion for the RMP/LRMP will be implemented. In order to minimize the "take" of these species, terms and conditions were established based on BMP's as described in the District's RMP. All applicable BMPs will be used when culvert replacement and road realignment activities occur on and near perennial, intermittent, and ephemeral streams and spring seeps. In addition, seasonal restrictions for in-channel work (ODFW 1997) at these sites will apply.
15. The listing status/consultation requirements for special status fish species is complex, and subject to change. Therefore, the status of consultation requirements for each project site will need to be assessed prior to awarding contracts, to begin work.

### **Monitoring of Preferred Action**

Compliance monitoring would be performed by BLM's Project Inspector for the project contract. The sites may also be periodically visited by resource specialists. Project inspectors will monitor each site, as the work is performed, to ensure that all contract stipulations are met. If, during the contract, problems arise that were not anticipated they will be brought to the attention of the contracting officer's representative, the EA team lead, and resource specialists.

Pre- and post-implementation monitoring will be carried out in accordance with the Northwest Forest Plan and the Coos Bay District RMP (BLM 1995). Future monitoring of the sites will be conducted as part of the district implementation monitoring plan under the ROD.



**Table 1 - Preferred Action Summary**

Site Name & Location	Site Repair or Use	Highest Seasonal & Daily Restrictions for the Site		Additional Comments
		Wildlife Comments <sup>1/2</sup>	Fisheries Comments <sup>3</sup>	
<b>ERFO SITE</b> - Road 21-9-32.0 Ferntop/Wassen mainline, mile post 1.5	<b>Realign</b>  Blasting may be needed.	Daily timing restriction <sup>1</sup> & Blasting restriction <sup>2</sup>		Outside POC range. Scotch Broom treatment needed. No Botanical concerns.
<b>WASTE SITE</b> - Road 21-9-29.2 (for Ferntop/Wassen)	<b>Waste Site</b> - Use dirt portion of road for waste. <b>Decommission</b> entire road.			Outside POC range. Scotch Broom treatment needed. No Botanical concerns.
<b>ERFO SITE</b> - Road 22-8-9.0 Paradise/Mosetown mainline, mile post 1.4	<b>Realign</b>  Blasting may be needed.	Daily timing restriction <sup>1</sup> & Blasting restriction <sup>2</sup>	A small seep could be impacted.	Outside POC range. Scotch Broom treatment needed. No Botanical concerns.
<b>WASTE SITE</b> - Road 21-8-9.1 (for Paradise/Mosetown)	<b>Waste Site</b> - site located off upper landing above 9.1 spur. <b>Redecommission</b> road near to mainline.	Daily timing restriction <sup>1</sup>		Outside POC range. Scotch Broom treatment needed. No Botanical concerns.
<b>ERFO SITE</b> - Road 23-9-14.0 Spur off Otter Creek, mile post. 4.8	<b>On Site Repair</b> - Open with cat, no waste site, and buttress the backslope.	Daily timing restriction <sup>1</sup> & Blasting restriction <sup>2</sup>		Outside POC range. Scotch Broom treatment needed. No Botanical concerns.
<b>ERFO SITE</b> - Road 27-10-6.0 North Fk. Rdg. Mainline, mile post 4.8	<b>Realign</b>  Blasting may be needed	Daily timing restriction <sup>1</sup> & Blasting restriction <sup>2</sup>		No POC documented. Scotch Broom treatment needed on haul route. No Botanical concerns.
<b>WASTE SITE 1:</b> Road 26-11-33.0 North Fk. Rdg. on Moon Ck	<b>Rock storage site:</b>  For future use.	Daily timing restriction <sup>1</sup>		No POC documented. Scotch Broom treatment needed if present. No Botanical concerns.
<b>WASTE SITE 2:</b> Road 26-11-33.0 North Fk. Rdg. on Moon Ck	<b>Waste Site</b> - Dirt dumped just off old landing on plantation flat.	Daily timing restriction <sup>1</sup>		No POC documented. Scotch Broom treated in past if present retreat. No Botanical concerns.
<b>ERFO SITE</b> - Road 27-10-4.1 Honcho Ck. Mainline, mile post 2.4	<b>Decommission</b> (slide site).  Road access is available above & below the slide.	Daily timing restriction <sup>1</sup> & Blasting restriction <sup>2</sup>		No POC documented. No noxious weeds noted. No Botanical concerns.
<b>ERFO SITE</b> - Road 29-12-1.1 John's Creek Mainline, mile post 1.9	<b>Drill, map, &amp; observe</b> site 1 year for repair solution. Need subsurface drainage for on site repair.	Daily timing restriction <sup>1</sup> & Blasting restriction (1 March - 5 August)		No POC documented. Scotch Broom treatment needed. No Botanical concerns.

1 Daily timing restriction: from 1 April - 15 Sept. work will be scheduled to occur no earlier than 2 hours after sunrise and no later than 2 hours after sunset.

2 Blasting restriction: no blasting will occur during the period 1 March - 30 September.

3 ODFW, on a project by project basis, may consider variations in climate, and location, and category of work that would allow more specific in-water work timing recommendations.

### SECTION III - AFFECTED ENVIRONMENT

This section describes the environmental components that could be affected, by either alternative. It does not address the environmental effects or consequences, but rather serves as the baseline for the comparisons in Section IV - Environmental Consequences.

#### Critical Elements of the Human Environment

Examination has shown the following critical elements of the human environment to be *unaffected* by the projects:.

- Air Quality
- Farmlands (Prime or Unique)
- Flood Plains
- Wilderness Values
- Cultural Resources \*
- Hazardous Materials & Solid Wastes \*
- Areas of Critical Environmental Concern
- Native American Religious Concerns
- Wild and Scenic Rivers
- Environmental Justice\*
- Port-Orford-Cedar Management\*

\* Specialist review required - any reports are located in the Analysis File

16. **Environmental Justice:** The proposed area(s) of activity are not known to be used by, or disproportionately used by, Native Americans, minorities or low-income populations for specific cultural activities, or at greater rates than the general population. This includes their relative geographic location and cultural, religious, employment, subsistence, or recreational activities that may bring them to the proposed area(s). BLM concludes that no disproportionately high or adverse human health or environmental effects will occur to Native Americans, minorities or low-income populations as a result of the preferred action(s).
17. **Cultural Resources:** Review of project documentation and a records check shows no known cultural resources in the vicinity of the proposed/existing road use area. *Section 2: Project Design Features* include stipulations that cover any discoveries that may occur.
18. **Port Orford Cedar Management:** The project areas and waste sites are outside Port Orford Cedars natural range, or Port Orford Cedar is not present (see Table 1). Standard vehicle washing stipulations are required and project work will occur mostly during the dry season. Since transportation via water and/or wet soil is the primary means of introducing and spreading the root disease (*Phytophthora lateralis*), these two stipulations help prevent the accidental spread or introduction of the root disease.
19. **Hazardous Materials:** Contaminant surveys have been conducted for each location, and approved by the District Environmental Specialist for Hazardous Materials/Solid Waste. No contaminants were identified. Any discoveries or accidents would be dealt in accordance with the applicable contingency plan as listed in *Section 2 Project Design Features*.

Examination has shown the following critical elements of the human environment could be *affected* by the projects:

- Water Quality (Surface/Ground)
- Noxious Weeds and Invasive Nonnative Species\*
- Threatened, Endangered, Survey and Manage, and other Special Status Species (Plants & Animals) \*
- Wetlands/Riparian Zones
- ACS objectives\*

\* Specialist review required - any reports, including effects determinations for wildlife, are located in the Analysis File

## **Water Quality (Surface/Ground)**

### Hydrology

The Coos Bay District climate is characterized by moderate temperatures, wet winters and cool, dry summers. Thus, precipitation in the form of rain is the major influence on hydrologic characteristics and controls the hydrologic cycle. Higher elevations may occasionally receive snow, but the quantity and duration of the snow does not normally produce rain-on-snow events. Varied topography of high relief has a strong effect on the precipitation pattern, causing large differences within small areas. Virtually all precipitation comes from general storms associated with tropical cyclones originating over the Pacific. Annual precipitation averages 60 to 70 inches along the coast, increasing to 80 to 120 inches near the Coast Range crest. Approximately 80% of the precipitation occurs between October and March (50% of that occurs between November and January). The months of July, August, and September receive only 4% of the annual precipitation.

The distribution of annual stream flow is closely related to the distribution of annual precipitation, thus high flows are observed during the winter months and low flows predominant in the summer. This close correlation between monthly precipitation and monthly stream flow indicates that these stream systems rapidly translate precipitation into runoff due to a high drainage density, low bedrock permeability, coarse textured and shallow soils, high precipitation totals, and steep slopes. The lack of ground water storage results in a “high” hydrologic response (i.e. rainfall rapidly becomes stream flow).

### Soils

The project sites are all located in the Coast Range physiographical province. The geological materials associated with the soils of the area are developed from the Roseburg, Tyee and Elkton Formations. Hazards associated with the Roseburg Formation are flash flooding and mass movement. The Tyee Formation tends to have high ground water in some areas, rapid runoff, steep slopes, and sharply alternating beds of sandstone and softer siltstones. The potential for slumps, debris and earth flows are intensified by these characteristics. The Tyee Formation grades into the finer-grained siltstone of the Elkton Formation. The siltstone is rarely inter-bedded with sandstone. Due to the fine-grained nature of the bedrock and steep slopes, slumps and earth flows are common. The geological units and the soils within the project areas can be found in the appendix listed on Table 2. Specific soil data can be obtained from the Soil Survey of Coos County, Oregon, 1989 and in the February 1994 Douglas County Area, Oregon Soil Inventory.

## **Threatened, Endangered, & Other Special Status Species (including Survey & Manage):**

### Fish - Aquatic Habitat / Aquatic Species (including Special Status Species)

All of the project sites are located within the Oregon Coast (OC) Evolutionary Significant Unit (ESU), which extends south of the Columbia River and north of Cape Blanco. The following summarizes the current listing status for fish species within the ESU:

- Coho salmon were listed as “threatened” on August 10, 1998. Critical Habitat was designated February 16, 2000.
- Steelhead trout was listed as a “candidate” species on March 19, 1998. Critical habitat is not designated for candidate species.
- On April 5, 1999, NMFS determined that the listing was not warranted for the Umpqua River coastal cutthroat trout. However, the Oregon Coast ESU is designated as a “candidate” for listing due to concerns over specific risk factors. Critical habitat is not designated for candidate species.

The road damage that has occurred at the project sites has resulted in varying degrees of impacts to fish-bearing streams. There has been little to no impacts to aquatic resources at the Otter Creek Spur Road or North Fork Ridge Mainline sites because no streams are in close proximity to the road failures. The other project sites, however, have varying degrees of sediment delivery to streams because of road and hill-slope failures. During rain events chronic sediment delivery, from the Honcho Creek site, is likely occurring to fish-bearing stream reaches in the Middle Creek drainage, and minor pulses of sedimentation may be occurring from the other sites. The specific effects on fish and/or their habitat is unknown, as a result of the road failures.

#### Wildlife Species Habitat and Occurrence (including T&E)

There are 3 wildlife species listed on the Federal Threatened and Endangered Species List that may occur at or near any of the project sites: northern spotted owl, marbled murrelet, and bald eagle (Coos Bay District Record of Decision and Resource Management Plan 1995; page 36 and Table C-3). Appendix A of the 1998 Coos Bay District Biological Opinion (US Fish and Wildlife Service 1998, # 1-7-98-F-079) lists Project Design Criteria designed to minimize potential detrimental effects to these species. These mitigation measures are based largely upon the proximity of these species or their habitats to the project sites.

Eight of the proposed project sites would occur within 1.0 mile and none would occur within 0.25 miles of a northern spotted owl site center. All 10 sites would occur within 1.0 mile of suitable northern spotted owl habitat. One of the project sites would occur within 1.0 miles and none would occur within 0.25 miles of a marbled murrelet occupied site. All 10 sites would occur within 0.25 miles of unsurveyed suitable marbled murrelet habitat and no sites would occur within areas that have been surveyed. None of the project sites would occur within 0.50 miles of a bald eagle nest or roost site and none of the project work would impact the use of foraging perches by bald eagles. There are no known peregrine falcon nests located within 1.0 miles of any of the project sites.

Table C-1 of the Coos Bay District Record of Decision and Resource Management Plan (1995) provides a list of species designated as Survey and Manage under the Northwest Forest Plan (see Record of Decision for Amendment to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (1994)). The most likely Survey and Manage animal species to occur at or near the project sites is the red tree vole. Red tree vole surveys were completed immediately adjacent to each project site having suitable habitat. No trees identified for removal contained potential or confirmed red tree vole nests. One project site (John's Creek) would occur within 25 miles of the most northern known Del Norte salamander location. However, the area surrounding this site is not suitable Del Norte salamander habitat therefore surveys are not required. None of the Survey and Manage mollusk species are expected to occur at the project sites and it is not known if any of the Survey and Manage arthropod species are present at any of the sites.

Table C-3 of the Coos Bay District Record of Decision and Resource Management Plan (1995) provides a list of Special Status Species that are known or suspected to occur on the Coos Bay District and thus could occur at the project sites. Given the proximity of the project sites to wet areas, amphibian species are of special concern relative to the proposed actions. Some Special Status amphibian species that could occur at project sites are the southern torrent salamander, clouded salamander, California slender salamander, western toad, tailed frog, northern red-legged frog, and foothill yellow-legged frog. Under the Preferred Action culvert installation will occur at 3 sites.

Appendix T of the Final Coos Bay District Proposed Resource Management Plan Environmental Impact Statement, Volume II (1994) lists wildlife species that occur on the Coos Bay District. Some of these species could be impacted by the proposed project activities.

#### Botanical

There are no known occurrences of Special Status plants, Survey and Manage Strategy 1 or Protection Buffer species within or adjacent to the project areas or waste sites. The only Survey and Manage (S & M) species most likely to occur at or near two of the six project sites include a bryophyte, *Diplophyllum albicans* and a fungi, *Tremiscus helvelloides*. Although predisturbance surveys for these species aren't required, surveys were conducted at the sites and adjacent areas. No presence of either species was found. All sites are within the existing road prisms which are subject to disturbance due to continual maintenance. No negative effects to special status plants or Survey & Manage species are anticipated from these projects.

#### **Noxious Weeds and Invasive Nonnative Species**

Scotch Broom occurs at most sites or along the roads (see Table 1), and are a likely seed source. No other noxious weeds or invasive nonnative species of concern were noted. *Section 2* includes standard design features to help prevent the introduction/spread of noxious weeds.

## SECTION IV - ENVIRONMENTAL CONSEQUENCES

This section provides the scientific and analytic basis for comparing the No Action and Preferred Action alternatives described in Section II. The potential short- and long-term impacts to the affected resources are discussed here for each project type, as it relates to the issues for each alternative. No irreversible or irretrievable commitment of resources have been identified for either of the alternatives.

### **No Action Alternative**

No major road repairs or road decommissioning would take place with this alternative. BLM road maintenance would continue at its current level, as identified in the ROD, including cleaning plugged culverts and ditches. The less severely damaged road segments would be patched to allow for vehicle traffic. Patching would not remedy the situation and road slippage would continue. More permanent blockages and road signs will be installed on roads that are not repairable. At some sites, private landowners may require access for management in the area before BLM. In that case those sites would be repaired according to private standards (subject to state requirements), which may be less than federal standards.

Due to the significant problems at the Honcho Creek Site mitigation beyond routine maintenance is suggested, if funding is available. It is recommended that the road fill be pulled from the stream channel and seeding, mulching, and fertilization of the site should occur, following BMP's.

### **Issue: Sedimentation - Direct Effects:**

#### **Water Quality (Surface/Ground)**

Hydrology and Soils - The routing of the surface and groundwater flows (i.e. runoff) would remain "as is" at most of the sites. Plugged culverts would continue to pose the risk of increased erosion in the event of a failure. Road failures and adjacent affected hillslopes which are presently contributing sediment to the stream network would continue to do so until the sites stabilize and naturally revegetate.

The Honcho Creek and Paradise Creek road failure sites are at stream crossings or directly on failed streambanks. Superficial repairs could continue to deliver sediment to the stream channels over the short term. Exposed soils, fill material, and debris jams will naturally revegetate and stabilize, however high intensity run-off events could cause additional erosion and continued slumping in the future. This could result in an increase in sediment delivery above baseline to downstream channels, potentially impacting water quality and stream channel morphology. Channel aggradation and a decrease in particle size may also occur with the addition of failed materials.

The remaining failures are above streams in first order draws and pose the risk of delivering sediment to the downstream stream networks through diversions during storm events. These road cuts and fills would continue to have a high potential to fail during winter storms. Some drainage problems may be corrected by the district road maintenance crews through ordinary road maintenance, and some stability may be gained on site by those actions.

**Threatened, Endangered, & Other Special Status Species (Including Survey & Manage):**

Fish - Aquatic Habitat / Aquatic Species (including Special Status Species)

The routing of the runoff (surface and groundwater) would remain “as is” at most of the sites. Road failures that are presently contributing sediment to aquatic resources will continue to do so until these sites stabilize and naturally revegetate. Fill material above road failures could be delivered to the stream network through diversions during storm events. The Honcho Creek drainage appears to be especially prone to additional failures until repairs are implemented.

Wildlife Species Habitat and Occurrence (including T&E)

Sedimentation is a concern primarily for aquatic forms of wildlife. Many of these species breathe through gills or their skin and if sediment is encountered it could interfere with this process. Under the “No Action” alternative, increased sedimentation could have a long term negative impact on aquatic wildlife.

Botanical

All sites are in existing road prisms, and are subject to continual disturbance from maintenance.

**Noxious Weeds and Invasive Nonnative Species**

The project sites have exposed soil created by the soil movement. Exposed soil is highly preferred by noxious weeds and invasive nonnative species. Standard road maintenance practices do not include grass seeding of these exposed sites. Under the “No Action” alternative no treatment of existing weeds or grass seeding will occur. There is a good probability that noxious weeds will become established at these sites.

**Issue: Sedimentation - Indirect Effects:**

**Water Quality (Surface/Ground)**

Hydrology and Soils: Exposed soils, fill material, and debris jams will naturally revegetate and stabilize, however, high intensity run-off events could cause additional erosion and road failures in the future. This could result in an increase in sediment delivery above baseline to downstream channels, potentially impacting water quality and stream channel morphology.

**Threatened, Endangered, & Other Special Status Species (Including Survey & Manage):**

Fish - Aquatic Habitat / Aquatic Species (including Special Status Species)

While these sites will naturally revegetate and stabilize future high intensity run-off events could cause additional erosion and road failures. This could result in an increase in sediment delivery above baseline to downstream channels, potentially impacting fish habitat and species.

Wildlife Species Habitat and Occurrence (including T&E)

There are no known indirect sedimentation consequences to the “No Action” alternative.

Botanical

No indirect effects have been identified for the “No Action” alternative.

**Noxious Weeds and Invasive Nonnative Species**

No indirect effects were identified under the “No Action” alternative.

## **Issue: Sedimentation - Cumulative Effects:**

### **Water Quality (Surface/Ground)**

Hydrology and Soils: There may be short term cumulative impacts from sediment delivery at these sites as erosion and soil loss continues to happen until these sites naturally revegetate. Natural revegetation could take 3 to 5 years or longer depending upon local seed sources, site aspect, and weather conditions. If these sites continue to receive above normal precipitation over this time period, sediment delivery to streams above background levels would have negative impacts to downstream water quality and channel morphology.

As these sites continue to sit in disrepair, other BLM activities as well as private forest management within Paradise Creek, Middle Smith River, Middle Creek, Mill Creek and the North Fork Coquille Watersheds will be ongoing. The types and amount of private forest management will not be known, therefore a cumulative impact analyses which would include these activities is difficult to determine, however, any level of soil loss contributing to sediment delivery will compound the negative impacts.

### **Threatened, Endangered, & Other Special Status Species (Including Survey & Manage):**

#### Fish - Aquatic Habitat / Aquatic Species (including Special Status Species)

There may be short-term cumulative impacts to fish/aquatic habitat from downstream sediment delivery at these concentrated sites as erosion and soil loss continues to happen until these sites naturally revegetate. Natural revegetation could take 3 to 5 years or longer depending upon local seed sources, site aspect, and weather conditions. Sediment delivery to streams above background levels would have negative impacts to downstream water quality and fish/aquatic habitats.

#### Wildlife Species Habitat and Occurrence (including T&E)

There are no known cumulative sedimentation consequences to the “No Action” alternative.

#### Botanical

Habitat would continue to follow the progressive successional stages that are typical of roadside sites in the western hemlock/Douglas-fir vegetation zone.

### **Noxious Weeds and Invasive Nonnative Species**

Non-treatment of these sites will aid in the persistence, spread, and size of these undesirable plant populations. Future control efforts would be harder (ex. Scotch Broom seeds last 80+ years).

### **Preferred Action Alternative**

The Preferred Action covers:

- ✧ Repairing or rebuilding four damaged roads within, or nearly within, their original alignment.
- ✧ Waste sites are identified for three of the repair sites (one of the four sites is for rock storage only).
- ✧ Decommissioning one damaged road, and two roads connected with the waste sites.
- ✧ Geotechnical investigation on road 29-12-1.1 to determine if fixing the road is feasible.



### **Consistency with Aquatic Conservation Strategy Objectives**

The Aquatic Conservation Strategy (ACS) was developed to restore and maintain the ecological health of a watershed and the aquatic ecosystems contained within them on public lands (Interagency 1994b). The strategy protects salmon and steelhead habitat on federal lands managed by the Forest Service and BLM within the range of Pacific Ocean anadromy (ROD, Standards and Guidelines, p. B-9). The appropriate landscape scale for evaluating the consistency of individual and groups of projects with the ACS is the watershed, corresponding with the “fifth-field” hydrologic unit code (HUC) as defined in the “Federal Guide for Ecosystem Analysis at the Watershed Scale”<sup>1</sup>.

The intent of the ACS is to maintain and restore aquatic habitats and the watershed functions and processes within the natural disturbance regime by prohibiting activities that retard or prevent attainment of the ACS objectives. The primary emphasis of the Standards and Guidelines for Riparian Reserves is restoration of the ecological processes and stream habitats that support riparian-dependant organisms. The important phrases in these standards and guidelines are “meet ACS objectives,” “does not retard or prevent attainment of ACS objectives,” and “attain ACS objectives.”

The following analysis describes how the proposed ERFO projects maintain the existing condition or lead to improved conditions in the long term for each of the nine ACS objectives.

*ACS Objective 1 - Maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species, populations, and communities are uniquely adapted.*

Completing the repair work at the various project sites will serve to protect the aquatic systems that have been impacted by road and hillslope failures. The outcome of the work will either maintain or improve the conditions that existed prior to the failures, and road damage that is presently impacting aquatic resources will be ameliorated. The proposed road repairs are consistent with this ACS Objective.

*ACS Objective 2 - Maintain and restore spatial and temporal connectivity within and between watersheds. Lateral, longitudinal, and drainage network connections include floodplains, wetlands, upslope areas, headwater tributaries, and intact refugia. These network connections must provide chemically and physically unobstructed routes to areas critical for fulfilling life history requirements of aquatic and riparian-dependent species.*

Because the work entails the repair of existing roads that will continue to be utilized in the future, conditions will be either maintained or improved at each project site. No new culverts will obstruct routes to areas critical for fulfilling life history requirements of aquatic and riparian-dependent species, and no known refugia will be affected by the proposed projects. Therefore, it is concluded this project is consistent with ACS Objective 2.

*ACS Objective 3 - Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations.*

The physical integrity of the aquatic system will be maintained by incorporating BMP's and design features as described in Section II. Some of the road failures that are presently degrading aquatic habitats through sedimentation will be corrected, and impacts to stream banks that

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<sup>1</sup> Reference November 9, 1999 Regional Ecosystem Office memorandum concerning Northwest Forest Plan Requirements for ACS consistency determination.

occurred as a result of the road failure will improve through time. Culverts will also be provided to improve road drainage features and minimize the potential for road failures in the future. Therefore, it is concluded this project is consistent with ACS Objective 3.

ACS Objective 4 - *Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. Water quality must remain within the range that maintains the biological, physical, and chemical integrity of the system and benefits survival, growth, reproduction, and migration of individuals composing aquatic and riparian communities.*

The proposed projects will maintain or improve the condition of the roads at each of the project sites. The road failures that are impacting water quality will be repaired and improve water quality conditions in the short- and long-term. Sediment filters will be located where sediment would have the potential to affect aquatic communities during construction activities, and disturbed soils will be re-vegetated to prevent chronic sedimentation. Therefore, the proposed projects would be consistent with ACS Objective 4.

ACS Objective 5 - *Maintain and restore the sediment regime under which aquatic ecosystems evolved. Elements of the sediment regime include the timing, volume, rate, and character of sediment input, storage, and transport.*

The proposed projects will reduce the severity and duration of sedimentation that is occurring due to the road failures. Although the extent of increased sedimentation that has occurred in the past and will occur until the projects are completed is unknown, it's expected that the road repairs will significantly decrease the timing and rate of sedimentation in the future. The elements outlined in ACS Objective 5 will be maintained or improved.

ACS Objective 6 - *Maintain and restore in-stream flows sufficient to create and sustain riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing. The timing, magnitude, duration, and spatial distribution of peak, high, and low flows must be protected.*

The proposed road repair projects are not likely to influence instream flows or affect peak, high, or low flows. Patterns of sediment, nutrient, and wood routing will be either maintained or improved because the proposed projects involve repairs to pre-existing roads. Therefore, it is concluded this project is consistent with ACS Objective 6.

ACS Objective 7 - *Maintain and restore the timing, variability, and duration of floodplain inundation and water table elevation in meadows and wetlands.*

The proposed projects will restore or improve the affected road segments. Therefore, no impacts to water tables or floodplains will occur and it is concluded this project is consistent with ACS Objective 7.

ACS Objective 8 - *Maintain and restore the species composition and structural diversity of plant communities in riparian areas and wetlands to provide adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration and to supply amounts and distributions of coarse woody debris sufficient to sustain physical complexity and stability.*

The loss of vegetation that occurred as a result of the road failures will be restored or improved in conjunction with the road repairs. Exposed soils will be re-vegetated to minimize sediment delivery to aquatic resources, and eventually provide shade to regulate temperatures in the

streams that are in close proximity to the project sites. Therefore, it is concluded the proposed project is consistent with ACS Objective 8.

ACS Objective 9 - Maintain and restore habitat to support well-distributed populations of native plant, invertebrate, and vertebrate riparian-dependent species.

Native grass seeds will be utilized to stabilize soils if available. If trees are planted in areas impacted by the road failures, only tree species indigenous to the affected areas will be used. Road repairs that reduce sediment delivery to aquatic resources will benefit the populations described under this objective. Habitat conditions that existed prior to the road failures will be either maintained or improved. Therefore, it is concluded this project is consistent with ACS Objective 9.

### **Noxious Weeds and Invasive Nonnative Species**

Noxious weeds and invasive nonnative species are not an issue due to Best Management Practices and other Design Features.

### **Issue: Sedimentation - Direct Effects:**

#### **Water Quality (Surface/Ground)**

Hydrology and Soils: Using BMP's and the design features of the proposed action during road repairs and culvert replacements, ensures compliance with Aquatic Conservation Strategy objectives, and terms and conditions of NMFS consultation and Biological Opinions.

There is the possibility for short-term low level amounts of fine sediments reaching stream channels during repairs along Honcho Creek only. These sediments could be visible in the receiving stream for a couple of hours after repairs are made. These sediments will be sorted by way of in-stream processes, but may be visible downstream for several hundred feet depending on stream volume and channel gradient.

Removal of some trees and brush may occur in the vicinity of the road grade to allow for proper road alignment and widening, but impacts on soil and hillslope stability will be minimal. Once vegetation is reestablished in areas where repairs occur, the amount of post-installation sediment delivered to streams should be negligible or eliminated.

When necessary the runoff will be accounted for and routed through the sites. Natural drainages will be returned as soon as possible. If stream crossings are deemed no longer necessary, existing culverts and fill will be removed to restore channel dimension, pattern and profile.

#### **Threatened, Endangered, & Other Special Status Species - (including Survey & Manage):** Fish - Aquatic Habitat / Aquatic Species (including Special Status Species)

The design features of the proposed action will employ BMPs during road repairs and culvert replacements, and reestablishment of vegetation following construction to ensure compliance with Aquatic Conservation Strategy objectives (see ACS section of this EA), and terms and conditions of NMFS consultation and Biological Opinions.

Although BMPs for erosion control will be employed at each repair site, there will likely be low level amounts of fine sediments reaching stream channels during repairs and the first freshets

following construction at the sites in proximity to stream channels. These sediments may be visible in the receiving stream from a couple of hours up to a few days after repairs are made. However, it's anticipated that the extent and duration of sedimentation will be less than what would occur if the road failures are not repaired.

Removal of some trees and brush may occur in the vicinity of the road grades, but impacts on soil and hillslope stability will be minimal. Once vegetation is established in areas where repairs occur, the amount of post-installation sediment delivered to streams should be negligible. Because slide and waste materials will be located in non-Riparian Reserve sites, impacts to aquatic resources are not anticipated as a result of the disposal of excess fill and materials resulting from construction work.

#### Wildlife Species Habitat and Occurrence (including T&E)

Sedimentation is a concern primarily for aquatic forms of wildlife. Many of these species breathe through gills or their skin and if sediment is encountered it would interfere with this process. Some sedimentation is inevitable with these projects and would be a short term impact. Mulching and seeding at project sites would aid in minimizing some sedimentation impacts. Following appropriate management practices that best minimize erosion and sedimentation would also decrease this impact.

#### Botanical

No direct impacts to Special Status, Survey and Manage and Protection Buffer plants species are expected. Each project site has been previously disturbed during initial road construction and subsequent maintenance of road.

### **Issue: Sedimentation - Indirect Effects:**

#### **Water Quality (Surface/Ground)**

Hydrology and Soils: By employing best management practices and seasonal in-stream work restrictions, sediment produced from site repairs will be minimized. Long-term downstream sediment delivery should be reduced. Seeding of grasses and legumes on exposed soils at the repair sites will ensure soil stabilization.

#### **Threatened, Endangered, & Other Special Status Species (Including Survey & Manage):**

##### Fish - Aquatic Habitat / Aquatic Species (including Special Status Species)

By employing BMPs and seasonal in-stream work restrictions, sediment produced from repairs at sites in close proximity to stream channel will be minimized, and any indirect impacts to fish and aquatic habitat would be short-term and not measurable. Daily recovery periods will provide clean waters to flow through the sites following cessation of work in the evening. Sediment delivery should be reduced, and reestablishing vegetation on disturbed ground will ensure long-term soil stabilization.

#### Wildlife Species Habitat and Occurrence (including T&E)

There are no known indirect sedimentation consequences to the Preferred Action.

#### Botanical

No indirect impacts to Special Status, Survey and Manage and Protection Buffer plants species are expected.

## **Issue: Sedimentation - Cumulative Effects:**

### **Water Quality (Surface/Ground)**

Hydrology and Soils: All road damage sites are widely scattered across many subwatersheds and drainages in the District.

There may be short term cumulative impacts to water quality and channel morphology from downstream sediment delivery during both initial and post construction when water is diverted and subsequently returned to it's original channel. However, BMPs for reducing erosion and soil loss will be used, and cumulative impacts to downstream water quality from repair actions at these sites will not be measurable.

As repairs are being made, other BLM activities as well as private forest management will be ongoing. The types and amount of private forest management will not be known; therefore, a cumulative impact analyses which would include these activities is difficult to determine.

### **Threatened, Endangered, & Other Special Status Species (Including Survey & Manage):**

Fish - Aquatic Habitat / Aquatic Species (including Special Status Species)

Cumulative impacts to downstream fish/aquatic habitat or water quality from the projects will likely not be measurable after soils are stabilized. The use of BMP's, working within the established in-stream disturbance period, and lack of precipitation is expected to minimize delivery of fine to medium sized sediment from the proposed action.

Wildlife Species Habitat and Occurrence (including T&E)

There are no known cumulative sedimentation effects to the Preferred Action.

### Botanical

Each project site has been previously disturbed during initial road construction and subsequent maintenance of road.

**Persons/Agencies Consulted:** Federal Highway Administration (FHWA)

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# APPENDIX

- A. Wildlife individual site descriptions.
- B. Hazmat level one site survey.
- C. ACS objectives.
- D. Table 2: Proposed Action and site information.

## **Wildlife Description of Individual Sites (Proposal and Field/GIS Review)**

### Ferntop, 21-9-32 mp 1.5

Proposal: Realign; move road 10-20' into hill. Blasting may be required to remove rock. Plant proposed project site as needed.

Field and GIS Review: The immediate surrounding areas are dominated by very young Douglas fir. There is no red tree vole habitat present and the site is located outside the range of the Del Norte salamander. One broken top snag located near the downhill portion of the slide should not be impacted by the proposed project. No other snags, wildlife trees, mature timber, or other special habitat would be impacted by the proposed project. No streams involved. The proposed project site is located within 0.25 miles of unsurveyed suitable marbled murrelet habitat, within 1.0 miles of a northern spotted owl nest site, and within 1.0 miles of suitable spotted owl habitat. No blasting activities should occur during the period 1 March - 30 September. Non blasting activities planned during the period 1 April - 15 September should occur during the period 2 hours after sunrise - 2 hours before sunset.

### Ferntop Waste Site, 21-9-29.2

Proposal: Deposit rock and soil on existing spur road, stabilize, plant as needed, and close the spur road.

Field and GIS Review: This short spur road leads to a landing located in a very young Douglas fir plantation. Waste material would be deposited and stabilized on the landing and along the road. The area would be planted appropriately and the road then closed. Road closure, in general, is highly beneficial to many wildlife species. No red tree vole habitat, snags, wildlife trees, mature timber, or other special habitat would be negatively impacted by the proposed project. The proposed project site is located outside the range of the Del Norte Salamander. The proposed project site is located within 0.25 miles of unsurveyed suitable marbled murrelet habitat and thus all activities planned during the period 1 April - 15 September should occur during the period 2 hours after sunrise - 2 hours before sunset.

### Paradise (Mosetown), 22-8-9 mp 1.4

Proposal: Realign by designing one 60' radius curve and one 100' radius curve. Blasting may be required. Place culvert in existing channel. Plant project site as needed.

Field and GIS Review: The area immediately above (west of the road) the slide event is alder. The stands to the north and south of this alder stand are mixed alder and young Douglas fir (< 16 inch DBH). These younger mixed stands are not suitable red tree vole habitat. The stand to the east of the road consists of mature Douglas fir (> 25 inch DBH), alder, and some maple. This stand contains at least one nice snag with heavy woodpecker use and several other wildlife trees. This stand is suitable habitat for red tree voles. No potential or confirmed red tree vole nests were visible in the area; however, ground surveys for red tree vole nests in mature timber is not conclusive. The proposed project site is located outside the range of the Del Norte Salamander. One red-tailed hawk was seen perched in the mature stand on 20 March 2000 but no nest was identified. Neither the obvious snag or any mature trees will be impacted by the proposed project. If the project proposal changes and mature trees need to be cut a biologist and a tree climber will need to examine the identified trees for potential raptor, spotted owl, marbled murrelet, and red tree vole nests.

A culvert will be placed in the existing channel to maintain the integrity of the stream. Due to the steep topography of the site, amphibian passage through the culvert is not an issue. The proposed project site is located within 0.25 miles of unsurveyed suitable marbled murrelet



habitat, within 1.0 miles of a northern spotted owl nest site, and adjacent to suitable northern spotted owl habitat. No blasting activities should occur during the period 1 March - 30 September. Non blasting activities planned during the period 1 April - 15 September should occur during the period 2 hours after sunrise - 2 hours before sunset.

#### Mosetown Waste Site, 21-8-9.1

Proposal: Deposit rock and soil on existing landing and surrounding area, stabilize, and plant as needed.

Field and GIS Review: This short spur road and landing are located in a young (<7 years) Douglas fir plantation. There is no red tree vole habitat present and the proposed project site is located outside the range of the Del Norte salamander. A few very young trees may be cut and/or buried by the deposition of waste material. However, since the site is so highly disturbed and the trees are so young the impacts to wildlife would not be significant. A small riparian area, snags, and mature trees are located > 200 feet from the proposed project site but will not be effected by the project. The proposed project site is located within 0.25 miles of unsurveyed suitable marbled murrelet habitat and thus all activities planned during the period 1 April - 15 September should occur during the period 2 hours after sunrise - 2 hours before sunset.

#### Otter Creek, 23-9-14 mp 0.4 spur

Proposal: Punch through the slide on the existing road corridor, buttress the back slope, install a culvert. No waste site needed.

Field and GIS Review: The immediate uphill and downhill area is highly disturbed by the slide event and many decay class 1 and 2 logs are thus present. Surrounding standing trees are second growth conifers. Two potential red tree vole nests were discovered in adjacent timber. No resin ducts were found and the nests were likely developed by squirrels. The very few trees (< 5) that may need to be cut do not contain any nests. Any cut trees and all existing logs should remain scattered on the site. The proposed project site is located outside the range of the Del Norte salamander. No snags, mature trees, wildlife trees, or other special habitat would be affected. No streams or amphibian crossings are involved; although a culvert will be installed. The proposed project site is located within 0.25 miles of unsurveyed suitable marbled murrelet habitat and thus all activities planned during the period 1 April - 15 September should occur during the period 2 hours after sunrise - 2 hours before sunset.

#### John's Creek, 29-12-1.1 mp 1.9

Proposal: Plan not yet solidified. Closing the road would have obvious benefits to many wildlife species; however, road closure is not a preferred option due to silvicultural needs in the area. The current plan is to drill, map, and observe the site for one year. Following this observation period an appropriate on site fix can be designed. The entire project may take 3 years. Culvert installation is likely.

Field and GIS Review. The downslope area is a recently planted Douglas fir stand. The uphill area is dominated by second growth Douglas fir. This second growth stand is suitable red tree vole habitat. No confirmed or potential red tree vole nests were discovered immediately adjacent to the road. However, if it is determined that tree removal is required, identified trees will need to be examined by a biologist for the presence of red tree vole nests. The proposed project site is also located within the range of the Del Norte salamander and the area should be surveyed for Del Norte salamander habitat. No snags, mature trees, wildlife trees, or other special habitat would be affected at the existing slide site. Streams are also not an issue at the current site; however, a culvert will be installed. The proposed project site is located within 0.25 miles of unsurveyed suitable marbled and thus all activities planned during the period 1 April - 15

September should occur during the period 2 hours after sunrise - 2 hours before sunset. If future analysis reveals that a reroute or significant realignment is required, all wildlife issues would have to be reevaluated.

#### Honcho Creek, 27-10-4.1 mp 2.4

Proposal: Road closure.

Field and GIS Review. Road closure, in general, is highly beneficial to many wildlife species. Since this area is adjacent to LSR, because the road is relatively wide, and because small adjacent habitat patches exist, the existing road should be subsoiled and planted. In addition to planting standard soil stabilizing species such as grasses (native seed mixes preferred for areas this large), conifer species should also be planted in those areas where adequate light is available. This prescription will allow the area to achieve a more natural state faster than if no conifer were planted and will also assist in deterring vehicular use of the closed road. The long term result will benefit many wildlife species by effectively removing the road barrier and by removing the small habitat patches that are currently too small to provide adequate habitat for most wildlife species. However, since the site is entirely on private land, planting conifer trees is not necessarily preferred because there is no long term guarantee that the created habitat will remain.

The proposed project site is surrounded by stands of second growth conifers on the uplands and alder on the wetter soil. No confirmed or potential red tree vole nests were discovered immediately adjacent to the project site and no trees are proposed for cutting. The proposed project site is located outside the range of the Del Norte Salamander. No snags, mature trees, wildlife trees, or other special habitat would be affected by the proposed project. At least 3 culverts currently exist on the proposed project site. All existing culverts should be removed and no culverts will be installed. The proposed project site is located within 0.25 miles of unsurveyed suitable marbled and thus all activities planned during the period 1 April - 15 September should occur during the period 2 hours after sunrise - 2 hours before sunset.

#### North Fork Ridge (Moon Creek), 27-10-6 mp 4.8

Proposal: Realign; move road 10-20' into hill. Blasting may be required to remove rock. Plant proposed project site as needed.

Field and GIS Review: At current state the road is easily passible by any vehicle using this road. However, the northern edge (down slope) appears unstable and widening the road to the south, into the rock, would improve safety at the site. The surrounding area contains young Douglas fir (<11 inch DBH), young alder, and young cedar. The immediate area is not suitable red tree vole habitat. The proposed project site is located outside the range of the Del Norte salamander. The proposed project site is located within 0.25 miles of unsurveyed suitable marbled murrelet habitat, within 1.0 miles of a northern spotted owl nest site, and within 1.0 miles of suitable northern spotted owl habitat. A metal culvert currently exists at the site. The inlet side is not visible and the outlet side is located at the top of the slide event. The topography is very steep and the slide event has formed a virtual cliff below the outlet. Amphibian passage is not an issue. A second plastic culvert has been placed approximately 50 feet east of the site and serves to displace roadside water down the slope; not in an existing channel. It would be impractical to change existing culvert design and placement. No blasting activities should occur during the period 1 March - 30 September. Non blasting activities planned during the period 1 April - 15 September should occur during the period 2 hours after sunrise - 2 hours before sunset.

#### North Fork Ridge (Moon Creek) Waste Site 1, 26-11-33.0

Proposal: Deposit soil, stabilize, and plant as needed.

Field and GIS Review: This proposed project site is an existing disturbed landing/pull-out adjacent to the main paved road. The immediate area surrounding the landing, to the north of the road, is young (<15 yrs) Douglas fir and is not suitable habitat for red tree voles. It is unlikely that any of these young trees will be damaged by proposed project actions. The stand to the south of the road consists of mature timber and as such contains many snags and other wildlife type trees. No potential or confirmed red tree vole nests were visible immediately adjacent to the road and since none of this habitat will be removed by proposed project activities, red tree voles are not an issue at this site. Wet soil type vegetation is located approximately 100 feet to the northwest and should not be affected as deposited waste (soil) will be limited to and within a few feet of the existing disturbed area. The waste material will be stabilize and planted to decrease erosion and sedimentation. There are no culvert or amphibian crossing issues and no snags, mature trees, wildlife trees or other special habitats will be affected. The proposed project site is located within 0.25 miles of unsurveyed suitable marbled murrelet and thus all activities planned during the period 1 April - 15 September should occur during the period 2 hours after sunrise - 2 hours before sunset.

#### North Fork Ridge (Moon Creek) Waste Site 2

Proposal: Deposit rock.

Field and GIS Review: This site is an existing disturbed rock quarry and is more or less lacking of significant vegetative wildlife habitat. The eastern edge is defined by a relatively small rock outcrop that does not contain any peregrine falcon or bat sign nor does it appear to be suitable habitat for either species. Young second growth Douglas fir trees are present around the site but would not be effected by the proposed project action. No snags, wildlife trees, mature trees, or other special wildlife habitat are present.

A. Background Information:

1. Agency: Bureau of Land Management - Coos Bay District

B. Site Name and Location: 1) 21-9-32.0 MP 1.5 Ferntop-Wassen Rd, 2) 21-9-29.2 Ferntop Waste Site, 3) 22-8-9.0 MP 1.4 Paradise-Mosetown Rd, 4) 21-8-9.1 Paradise Waste Site, 5) 23-9-14.0 MP 4.8 Otter Ck. Spur Rd, 6) 27-10-6.0 MP 4.8 North Fk. Rdg. Rd, 7) 26-11-33.0 Sec. 20 Moon Ck. Rd. Waste Site 1 for N. Fk. Rdg. Rd, 8) 26-11-33.0 Sec. 19 Moon Ck. Rd. Waste Site 2 for N. Fk. Rdg. Rd, 9) 27-10-4.1 MP 2.4 Honcho Ck Rd, 10) 29-12-1.1 MP 1.9 John's Ck. Rd. - See EA OR125-00-05 for Townships, Ranges, and Sections

3. Date of Survey: 3/20/00 and 03/22/00 by Scott Lee Knowles, from Umpqua FO

B. Site Inspection:

	ON-SITE	NEARBY	NONE
1. Dumps, containers, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Other debris	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Fill areas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Unusual odors	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Storage tanks, petroleum products, pesticides	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Buildings: Equipment repair, parking, chemical storage.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Structures: Asbestos, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Vegetation: Bare areas, discoloration, dead material.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Water: Sterile or encumbered	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Oil spills, seeps, stained ground	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Oil slicks, odd surface water color	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Spray operation base	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Machinery storage, repair areas	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14. Pipelines, electric equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15. Oiled road surface	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16. Electrical transformers, evidence of leakage or disrepair	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17. Explosives	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

C. Record Searches

	YES	NO
1. Past uses which might indicate potential problem on site: Manufacturing, storage, service station, dry cleaning, air strips, pipelines, rail lines, labs, landfills, transformers, other (describe)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Nearby land uses that might have had waste to dump at site. Identify: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Known contaminated sites in vicinity: National Priority List (NPL), state sites, candidate sites	N/A	<input checked="" type="checkbox"/>
4. Interviews on past use: owners, neighbors, State or County agents, etc. Problems? (Attach any notes.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Agricultural drainage history; surface, subsurface drains.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

D. Has a non-Federal entity identified any hazardous material problems on or near the site surveyed? (Attach documentation.)

☒

E. Certification

1. I hereby certify that to the best of my knowledge no contaminants are present on this site, and there are no obvious signs of any effects of contamination.

Signed: \_\_\_\_\_ Title: Natural Resource Spec.

Name: Scott Lee Knowles Date: May 11, 2000

F. Review and Recommendations:

1. I have reviewed this report, interviewed the site inspector and have the following recommendations:

	<u>YES</u>	<u>NO</u>
a. A Level II site survey is recommended/required	_____	<u>X</u>
b. Other recommendations: <u>Compliance with applicable Federal and State guidelines for petroleum and chemical spills is required. These include the Oregon Forest Practices Act Petroleum Product Precautions Rule (OAR 629-57-3600) and Oregon DEQ Oil and Hazardous Material Spill and Releases Rule (OAR 340-108). In addition, the District Spill Plan for Riparian Operations will be in effect.</u>		

Signed: \_\_\_\_\_ Title: Environmental Protection Spec.

Name: Timothy A. Votaw Date: September 29, 2000

## **Aquatic Conservation Strategy**

Forest Service and BLM-administered lands within the range of the northern spotted owl will be managed to:

1. Maintain and restore the distribution, diversity, and complexity of watershed and landscape-scale features to ensure protection of the aquatic systems to which species, populations, and communities are uniquely adapted.
2. Maintain and restore spatial and temporal connectivity within and between watersheds. Lateral, longitudinal, and drainage network connections include floodplains, wetlands, upslope areas, headwater tributaries, and intact refugia. These network connections must provide chemically and physically unobstructed routes to areas critical for fulfilling life history requirements of aquatic and riparian-dependant species.
3. Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations.
4. Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. Water quality must remain within the range that maintains the biological, physical, and chemical integrity of the system and benefits survival, growth, reproduction, and migration of individuals composing aquatic and riparian communities.
5. Maintain and restore the sediment regime under which aquatic ecosystems evolved. Elements of the sediment regime include the timing, volume, rate, and character of sediment input, storage, and transport.
6. Maintain and restore in-stream flows sufficient to create and sustain riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing. The timing, magnitude, duration, and spatial distribution of peak, high, and low flows must be protected.
7. Maintain and restore the timing, variability, and duration of flood-plain inundation and water table elevation in meadows and wetlands.
8. Maintain and restore the species composition and structural diversity of plant communities in riparian zones and wetlands to provide adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration and to supply amounts and distribution of coarse woody debris sufficient to sustain physical complexity and stability.
9. Maintain and restore habitat to support well-distributed populations of native plant, invertebrate, and vertebrate riparian-dependent species.

**Table 2 - Proposed Actions & Site Information**

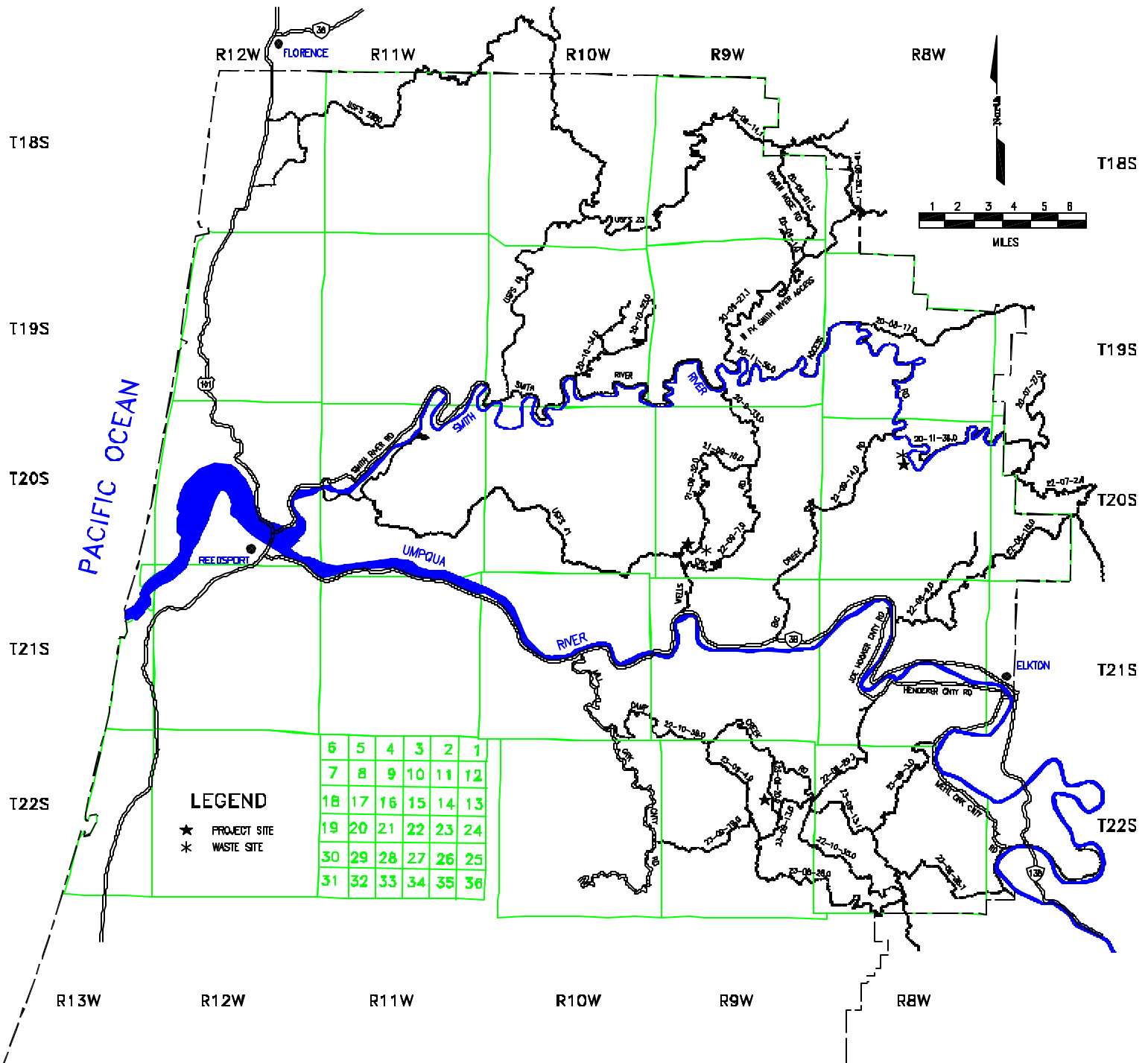
Site Name & milepost BLM Road Number Road Location T-R-S	Land Use Allocation, Subwatershed, HUC #, 5 <sup>th</sup> Field, and acres	Proposed Repair or use for the Site	Soils	Geology	<u>Highest Seasonal &amp; Daily Restrictions for the Site</u>		Additional Comments
					Wildlife Comments <sup>1/2</sup>	Fisheries Comments <sup>3</sup>	
Ferntop/Wassen mainline mile post 1.5 Road 21-9-32.0 T21S R9W Sec. 29	LSR - Middle Smith River, 1710030307, Lower Smith River (BLM 37,873 - total 143,877)	Realign - move over 10'-20' & straighten curve - blasting possible	Digger-Bohannon-Umpcoos Complex (240G), 60 - 90 % slopes	Tyee Formation	Daily timing restriction and Blasting restriction.	No aquatic resources in vicinity of road failure. Resident cutthroat trout occur in Wassen Creek about 1/4 mile to the north.	Outside POC natural range. Scotch Broom treatment needed. No Botanical concerns.
Waste Site for Ferntop/Wassen Road 21-9-29.2 T21S R9W Sec. 29	LSR - Middle Smith River, 1710030307	Waste placed on dirt portion of road and shaped. Decommission entire road when done.	Honeygrove Gravelly Clay Loam (305E), 3 - 30 % slopes	Tyee Formation	Daily timing restriction and Blasting restriction.		Outside POC natural range. Scotch Broom treatment needed. No Botanical concerns.
Paradise/Mosetown mainline mile post 1.4 Road 22-8-9.0 T21S R8W Sec. 9	GFMA (matrix) - Paradise Ck. Tier 1 Key Subwatershed, 1710030304, Middle Umpqua River (BLM 22,919 - total 63,458)	Realign - 60' radius & 100' radius with culvert in draw - Blasting possible.	Xanadu Gravelly Loam (377E), 3 - 30 % slopes	Tyee Formation	Daily timing restriction and Blasting restriction.	A small seep (drains eastward) is the only aquatic resource to be potentially impacted by the work. Coho salmon, steelhead trout, and cutthroat trout (anadromous and resident) are in the Smith River about 0.2 miles east of the site.	Outside POC natural range. Scotch Broom treatment needed. No Botanical concerns.
Waste site for Paradise/Mosetown Road Road 21-8-9.1 T21S R8W Sec. 9	GFMA (matrix) - Paradise Ck. Tier 1 Key Subwatershed, 1710030304	Waste placed between upper landing and 9.1 spur. Road reclosed by mainline.	Digger-Bohannon-Umpcoos Complex (240G), 60 - 90 % slopes	Tyee Formation	Daily timing restriction and Blasting restriction.		Outside POC natural range. Scotch Broom treatment needed. No Botanical concerns.
Spur off Otter Creek mile post. 4.8 Road 23-9-14.0 T23S R9W Sec. 14	LSR - Mill Creek, 1710030305, Mill Creek Umpqua River (BLM 24,853 - total 85,922)	Repair - open with cat, no waste site, buttress backslope	McDuff-Absaquil-Honeygrove Complex (555F), 30 - 60 % slope	Elkton Formation	Daily timing restriction and Blasting restriction.	No aquatic resources occur in close proximity to the project site.	Outside POC natural range. Scotch Broom treatment needed. No Botanical concerns.
North Fk. Rdg. Mainline mile post 4.8 Road 27-10-6.0 T26S R10W Sec. 20	Private Land Middle Ck., 1710030505, North Fork Coquille (BLM 36,863 - total 98,466)	Realign - move over 10'-20' - blasting possible	Umpcoos-Rock Outcrop Association (58F), 70 - 99 % slopes	Tyee Formation	Daily timing restriction and Blasting restriction	No aquatic resources occur in close proximity to the project site.	No POC documented. Scotch Broom treatment needed on haul route. No Botanical concerns.
Waste Site 1: North Fk. Rdg. on Moon Ck Road 26-11-33.0 T26S R10W Sect 20	Private Land Middle Ck., 1710030505	Store rocks for future instream or other use.			Daily timing restriction.		No POC documented. Scotch Broom treatment needed if present. No Botanical concerns.
Waste Site 2: North Fk. Rdg. on Moon Ck Road 26-11-33.0 T26S R10W Sec. 19	LSR - Middle Ck., 1710030505	Dirt dumped just off old landing on flat of plantation.			Daily timing restriction and Blasting restriction.		No POC documented - Scotch Broom treated in past if present retreat. No Botanical concerns.
Honcho Ck. Mainline mile post 2.4 Road 27-10-4.1 T26S R10W Sec. 28	Private Land Middle Ck. Subwatershed - LSR surrounds, 1710030505	Close - access available above & below-decommission road	Milbury-Bohannon-Umpcoos Association(38F), 50 - 80 % slopes	Tyee Formation	Daily timing restriction and Blasting restriction.	Coho salmon, resident cutthroat trout, and steelhead trout are in mainstem Middle Creek about 1 mile south of the project location.	No POC documented. No noxious weeds noted. No Botanical concerns.
John's Creek Mainline mile post 1.9 Road 29-12-1.1 T29S R11W Sec. 7	GFMA (matrix) North Fork Coquille Watershed, 1710030505, North Fork Coquille	Repair - Drill & map site, observe for 1 year. Provide subsurface drainage for on site repair	Preacher-Blachly-Digger Association (45E), 30 - 60% slopes	Roseburg Formation	Daily timing restriction. Blasting restriction of 1 March thru 5 August.	Steelhead trout & resident cutthroat trout are above waterfall in John's Creek about .5 miles south, and coho below falls another ½ mile.	No POC documented. Scotch Broom treatment needed. No Botanical concerns.

1 Daily timing restriction: from 1 April - 15 Sept. work will be scheduled to occur no earlier than 2 hours after sunrise and no later than 2 hours after sunset.

2 Blasting restriction: no blasting will occur during the period 1 March - 30 September.

3 ODFW, on a project by project basis, may consider variations in climate, and location, and category of work that would allow more specific in-water work timing recommendations.

ERFO PROJECT SITES AND WASTE SITES  
LOCATION MAP 1  
UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
COOS BAY DISTRICT OFFICE  
UMPQUA RESOURCE AREA  
NORTH HALF





ERFO PROJECT SITES AND WASTE SITES  
LOCATION MAP 2  
UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
COOS BAY DISTRICT OFFICE  
UMPQUARESOURCE AREA  
SOUTH HALF

